Amendments to the Specification:

1. Please replace the paragraph beginning on page 2 at line 1 with the following new paragraph.

"Therefore, it would be desirable to have a system which automatically monitors the noise level as determined by some parameter such as the packet loss rate, and automatically adjusts the throughput to lower the packet loss rate to some acceptable level. This would avoid the need for cable operators to constantly monitor noise level or packet loss rate and would maximize throughput for conditions at all times since the throughput of upstream channels would be raised automatically during low noise conditions.

2. Please replace the paragraph beginning on page 2 at line 8 with the following new paragraph.

"There is disclosed herein a system to adjust the bit rate to the channel noise conditions automatically, or manually in some embodiments, to reduce the need for the cable system operator to monitor noise conditions on the line. The system measures the channel condition by monitoring any one or more of the following characteristics of the channel:"

3. Please replace the paragraph beginning on page 13 at line 11 with the following new paragraph.

"Step 76 represents the process of receiving a packet and adding the total number of codewords received to the running total of codewords received for this logical channel for the interval being processed. This can be done in an accumulator in hardware or by a software process to keep the running total. This is done only if the packet is not transmitted in response to a contention grant. Any packets received which were transmitted in response to a contention grant are discarded are discarded in the preferred embodiment, and only packets with specific

~~IUCs~~ interval usage codes (IUCs) are counted. In the preferred embodiment, only packets with the IUCs of a long data packet are counted, but in alternative embodiments, the total number of codewords received in both long and short data packets is counted. The running total of codewords received for this logical channel at the end of the interval is the quantity n-total in equation (1) below."